The English universities and professional education

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Part Four: The Process of Professionalization

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Professional education was the primary function of the medieval universities throughout Europe. The Higher Faculties of Law, Medicine and Theology were intended for this purpose and the Arts Faculty was only conceived as preparation for study in these Higher Faculties. At the time of the Renaissance, however, the influx of laity into the universities, influenced by the new secular ideal of the *virtuosi* had the effect of altering these ideals. In England, the Reformation also rendered the Civil and Canon Law taught in the universities obsolete. Furthermore the establishment of endowed colleges tended to have the effect of insulating the universities from the necessity of catering to student needs or the powers of the State in order to maintain their incomes. As a result, a new concept of "liberal education" developed which was deliberately non-professional. It rested upon the traditional Arts subjects of classical languages and literature and pure mathematics, but instead of viewing these as stepping stones to the higher professional faculties, they became ends in themselves. It was argued that the primary need of the educated gentleman was for a training which would discipline and cultivate the mental faculties. The practical content of the education became distinctly less important as the disciplinary value increased in importance.

During the 19th century the notion of the unique suitability of classical studies and mathematics for "liberal education" was abandoned. Scholars in other disciplines were successful in gaining acceptance for the view that the study of any abstract scholarly subject in sufficient depth would provide the needed intellectual discipline.[1] The antiprofessional spirit, however, remained as the most important hall-

1. On this subject, see Sheldon Rothblatt, *Tradition and Change in English Liberal Education* (London, 1977). This broadening of the curriculum was also important in that it provided the flexibility which allowed "liberal education" to be viewed as sufficient training for those occupations, such as the Civil Service, in which university influence was especially strong. See, Ray Jones, *The 19th Century Foreign Office: An Administrative History* (London, 1971). Also see J. M. Compton, "Open Competition and the Indian Civil Service 1854-1876," *English Historical Review,* 327 (1968), 265-84. Also R. J. Moore, "The Abolition of Patronage in the Indian Civil Service and the Closure of Haileybury College," *Historical Journal,* 7 (1964), 246-57. Also, C. J. Dewey, "The Education of a Ruling Caste: The Indian Civil Ser-

mark of "liberal education" and university study. John Stuart Mill summarized this view in his rectoral address to the University of St. Andrews in 1867:

> The proper function of an University in national education is tolerably well understood. At least, there is a tolerably general agreement about what an University is not. It is not a place of professional education. Universities are not intended to teach the knowledge required to fit men for some special mode of gaining their livelihood. Their object is not to make skillful lawyers, or physicians, or engineers, but capable and cultivated human beings .... Men are men before they are lawyers, or physicians or merchants, or manufacturers; and if you make them capable and sensible men, they will make themselves capable and sensible lawyers or physicians.[2]

The System of Professional Apprenticeship:

Since the universities had abdicated the role of professional education, systems of apprenticeship tended to take their place in the traditional learned professions. Physicians "walked the rounds" in hospitals, lawyers served under articles and ate their dinners at the Inns of Court, clergymen took curacies while waiting for benefices of their own. Of course, this *ad hoc* solution did not have to wait long for intellectual justification. It soon came to be urged that the practical nature of these programs of professional education marked their superiority to mere literary or theoretical instruction. In all of the learned professions, a strong anti-abstract bias developed. The clergyman must be indistinguishable from an ordinary gentleman except for his black coat, the lawyer must look to his precedents and the physician to his clinical cases. It came to be argued that the particular genius of English professional life was its freedom from the narrowness, pedantry and unreality which plagued more formally educated professional communities. The higher faculties atrophied completely as educational institutions and remained only to grant the honorific distinction of doctoral degrees to those who had obtained their training elsewhere. In fact, they even gave up testing that practically acquired knowledge and often merely granted their degrees to arts graduates of the requisite number of terms beyond the bachelors degree who had submitted to purely formal exercises and paid the required fees.

The only other connection which remained between the universities and the professions was the fellowship system, whose purpose had always been primarily to support arts graduates during their professional training. With the decline of the educational function of the higher faculties, the fellowships came to be used to support graduates away from the university until they had established themselves in professional life. Since most fellowships required the taking of holy orders and all the colleges of Oxford and Cambridge held church livings which were offered to the fellows in order of seniority, most college fellows became clergymen, but a few used their fellowship incomes to support themselves while preparing for careers at the bar or in medicine.[3]

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vice in the Era of Competitive Examinations," *English Historical Review*, 88 (1973), 262–85.

2. Reprinted in *James and John Stuart Mill on Education*, F. A. Cavenagh (ed.) (Cambridge, 1931), 133–34. Cited in Sheldon Rothblatt, *Revolution of the Dons* (New York, 1968), 248.
3. An argument in favor of their retention for this purpose continued to be made throughout the 19th century. When Benjamin Jowett prepared his memorandum on university reform in

This English system was never without its critics. Neither on the Continent nor in Scotland did the universities give up their role in professional education. A concern for a revival of professional education was manifest from the beginning of the reform of the English universities in the early 19th century. Rising numbers caused by population growth, economic development and the burying of old political differences put the glare of public scrutiny on the ancient universities and provided an impetus for reform. Originally, the calls for change were unfocused and diffuse. Demands for revived professional studies were combined with complaints of outmoded studies, lack of learned research, meaningless and ritualized examinations, student extravagance and the appropriation by the rich and well-connected of charitable support which had been meant by the donors for the poor. Gradually, however, calls for renewed and expanded professional studies began to form a distinct ideology of university reform. As one reviewer wrote, attacking Oxford and Cambridge in 1846, "we cannot think that universities will be at all more successful in cultivating either truth or taste in the abstract, if everything that can be called practical, we may add, professional, be removed to a distance from them."[4] When University College, London, was founded in 1826, professional studies in Law and Medicine were stated to be one of its most important objectives.[5] Nonetheless, the most striking point about these early efforts is how little positive response they elicited, either from the public, the universities or the professions.

One problem was that the triumph of "liberal education" had meant the denigration of the intellectual value of all practical or professional education. This theme was used skillfully in an 1825 parody of the proposed curriculum at University College, London.

> The Hon. James Abercrombie is...to ground the young linendrapers and men-milliners in the law of chivalry, in which he will be assisted by his butler. ... Dr. Olympus Gregory will instruct the junior fish-mongers in the science of throwing shells, and Mr. George Grote will give lessons on the most graceful mode of standing behind a counter.[6]

A similar point was made in a satire of the Oxford Royal Commission of 1850. The evidence from "an Austrailian Colonist formerly engaged in the Oxford coaching business" ridiculed the demands being made at that time for more practical and professional education at Oxford.

> I've known Oxford Gents out in Horsetraily in werry rummy sitivations, for which they wasn't qualified by no means by a College edication; vun in partickler as wos a Boots at Sydney, and neber had been taught by any College Tutor how to put the polish on a Boot, or tell a Nugget

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1874, he argued, "They ... give opportunity to those who have to make their way in the world of entering liberal professions." Cited in Lewis Campbell, "Oxford Reform," *The University Review*, 5 (1907), 493.

4. "Oxford and Cambridge: University Reform," *British Quarterly Review*, 3 (1846), 365-66. See also "Reform of Oxford University," *Tait's Edinburgh Magazine*, 16 (1849), especially 709 for another example of this argument. Cited in Arthur Engel, "Emerging Concepts of the Academic Profession at Oxford 1800-1854," in L. Stone (ed.), *The University and Society* (Princeton, 1974), 1:322. See also on this issue at Oxford, 322-338, passim.
5. See H. Hale Bellot, *University College, London 1826-1926* (London, 1929), 53.
6. *John Bull*, 18 Dec. 1825. Cited in Bellot, 70.

when he seed it from a piece off quarts, and yet he'd paid his money to the Buzzer reglar every term.[7]

The proponents of "liberal education" saw their non-vocational classical and mathematical studies as being not only of higher educational value than the mere "information" conveyed in professional education, but also of higher social value. From this perspective, it was possible to collapse all distinctions between business, trade, science, technical skills and manual labor. The traditional contempt for business and labor could be used to dismiss all attempts to provide university education in pratical or professional subjects.

The attitudes of the professions themselves toward universities and degrees reinforced this situation. Their long tradition of suspicion of theoretical instruction and knowledge was of great importance. Also crucial was the fact that they had developed their own distinctive modes of professional training and these interests would be injured by professional education within the universities. At University College, London, for example, the plan for Law instruction failed because both the Law Society and the Inner Temple responded to this threat to their exclusive control of the professions of solicitor and barrister by setting up their own programs of lectures in 1833.[8] When University College, London attempted to obtain the right to grant medical degrees in 1833, the medical profession reacted with hostility since this would interfere with their own hospital training. They had no special love for the Oxford and Cambridge monopoly on degrees but they were unwilling to give this power to another university. Instead they were the original architects of the plan which was eventually accepted in 1837, whereby a new University of London was chartered as an examining and degree-granting institution only. In this way, the interests of the London hospitals were protected and University College gained no advantage over them.[9]

One result of this situation was that as Oxford and Cambridge went about the tasks of internally motivated reform, professional education played no role in their plans. It was only in the late 1840s, with the threat of external government visitation hanging heavily over them, that the ancient universities made any movement toward professional studies. In 1848, Cambridge established two new honors examinations, a "moral science" tripos which included political economy, jurisprudence, history and philosophy intended as pre-professional training for the aspiring lawyer, and a "natural science" tripos meant for those intended for Medicine.[10] Oxford followed suit in 1850 with parallel honors schools of "law and modern history" and "natural science."[11] Both of these new studies at the ancient universities met with very cool receptions and were not regarded with any more favor by the professions. They were essentially sops to the reforming zeal of the external critics, mostly Scottish. The fact

7. *Eureka, No. II. A Sequel to a Sequel to Lord John Russell's Post-Bag* (Oxford, 1853), 31, 33. Bodl. G. A. Oxon. 8 63 (19). Attributed to J. G. Landon of Magdalen College by E. H. Cordeaux and D. H. Merry, *A Bibliography of Printed Works Relating to the University of Oxford* (Oxford, 1968).
8. Bellot, 50–55.
9. Bellot, 215–48.
10. See W. A. Winstanley, *Early Victorian Cambridge* (Cambridge, 1940). See also Rothblatt, *Revolution of the Dons,* 135, 166–7.
11. See C. E. Mallet, *A History of the University of Oxford* (London, 1927), 3:294–97.

that these new studies attracted few students and those not of the highest caliber was itself useful in justifying the original hostility of the universities and their low opinion of the intellectual value of these subjects.

In all of the traditional learned professions, formal education began to play some role in professional training in the early 19th century, though the universities had only a very small part in this development. In Medicine, the movement toward certification and licensing which began with the Apothecaries Act of 1815 served as a powerful stimulus to the creation of medical schools. In several provincial cities, medical schools were established in the 1820s and 1830s which eventually became the nuclei of the university colleges and new universities of the late 19th and early 20th centuries.[12] At University College, London, the medical department was the most flourishing part of the institution in the early years.[13]

The movement toward the establisment of theological colleges also began during this period. They were an expression of the realization that, given the low value of so many church livings, growing population and the increased standards of pastoral activity expected from the clergy, it was hopeless to expect that the universities would be able to supply this need.[14] Nonetheless, there were great fears that such professional education for the clergy would produce undesirable narrowness, sectarianism and theological pecularities.[15] One of the strong motivations for the eventual establishment of honors schools and tripos in theology at Oxford and Cambridge was the feeling that these inherent dangers of professional education could be minimized most effectively through their inclusion within the broadening, "liberal" culture of the university.

The Law showed the least interest in formal education throughout the 19th century. Since barristers were undoubtedly the most prestigious professional people of the period, they saw no reason for change. The small movement toward formal education represented by the lectures at the Inns of Court and the creation of a rather perfunctory examination for admission to the bar were simply tactical moves to forestall encroachments on their autonomy by University College, London.

The attitude of the traditional learned professions toward the universities had a profound effect on the newer occupations such as engineering, accountancy, architecture and dentistry which had aspirations toward professional status. In general, the policy of all aspiring and upwardly-mobile occupations has been to imitate as exactly as possible the formal characteristics of the most respected profession of their

12. For example, Sheffield established a medical school in 1828, Leeds in 1831 and Durham in 1836.
13. Bellot, 124.
14. See F. W. B. Bullock, *A History of Training for the Ministry of the Church of England in England and Wales: From 1800 to 1874* (St. Leonards-on-Sea, 1955), esp. 37–44. St. Bees was founded in 1816, St. David's, Lampeter in 1822, Islington in 1826, Chichester in 1839 and Wells in 1840. For changing clerical ideals, see Brian Heeney, *A Different Kind of Gentleman: Parish Clergy as Professional Men in Early and Mid-Victorian England* (Hamden, Conn., 1976).
15. These fears were especially marked at Cuddesdon College, which was founded in the diocese of Oxford by Samuel Wilberforce. See Owen Chadwick, *The Founding of Cuddesdon* (Oxford, 1954).

period. In the 19th century the bar led the professions both in terms of income and status and their distaste for professional education had a great impact on other nascent professions. Since the bar had no real connection with the universities except as purveyors of honorific degrees, new occupations didn't look in this direction either. They put their emphasis on forming professional organizations, gaining state recognition and eventually certification. In terms of training, they were content to rely on the traditional system of apprenticeship, articles and practical experience.[16]

The Reintroduction of Professional Education into the University:

The really important change in this picture of very limited contact and mutual suspicion between the English universities and the professions did not occur until the 1860s and 1870s. England's economic success and industrial superiority to the other nations of Europe had been the great unspoken argument in favor of English self-satisfaction with her institutions. This support began to fall away after the Paris exhibition of 1867, which had revealed a traumatic contrast to the Great Exhibition of 1851. German and French technical achievements were the star attractions of the 1867 show and the superiority of English manufacturers was no longer evident. English self-confidence continued to decline in the 1870s and 1880s as it became clear that England was being outstripped industially by Germany. Since German industry was supported by an elaborate system of technical, scientific and professional education, an increasing flow of anxious government commissions and reports began to insist that the English must imitate this trend if they were to maintain their economic position.[17] The close and obvious connections between industrial and military power gave this argument a further note of urgency.

The expansion of the English university system itself in the second half of the 19th century also had the effect of drawing closer connections between the universities and professions. The new university colleges, founded as expressions of civic pride, often by donors with a keen interest in technical and scientific education, had none of the traditional qualms about catering to student or public needs for vocational and professional training. Especially after their attainment of independent status as degree-granting institutions, the new universities moved aggressively into the area of professional education. For example, when Liverpool became a separate university in 1903, it quickly established degree programs in dental surgery, architecture, veterinary medicine and engineering. Student numbers practically doubled during the first

16. For example, although University College, London had founded professorships in architecture and engineering in 1841, these subjects attracted few students until the 1880s. See Bellot, 265-67.

17. See, for example, the report by Prof. L. Levi on *Technical, Industrial and Professional Instruction in Italy and Other Countries, Parl. Papers* 1867-8 (33) liv. Also see the translation of the French Ministry of Agriculture, Commerce and Public Works report on "Technical Instruction," *Parl. Papers* 1867-8 (3967) lv. See also the report of the Royal Commission on Scientific Instruction and the Advancement of Science, *Parl. Papers,* 1871 (C. 318) 24 (and the seven additional reports on this subject 1872-1875). See also the Royal Commission on Technical Instruction, *Parl. Papers* 1882 (C. 3171) 27 (and the second report in four volumes in 1884).

decade of university status.[18] At Leeds, although a professorship in economics had been created in 1901–02, it was not until 1904, when it attained independent university status, that a degree in "Commerce" was established.[19] Within its first decade, Sheffield entered into legal education, architecture, teacher training and mining.[20]

An unwonted tone of aggressive support for professional and technical education at the new universities can be caught in the speech of Sir Richard Henn Collins, the Master of the Rolls, at the Annual Court dinner at Leeds University in 1906. In proposing the toast to the University, he asserted:

> They had had the courage to treat subjects which were connected with earning a livelihood as fit subjects for University teaching, and the action of Leeds University in introducing the arts of weaving, dyeing, engineering, and agriculture, and he might say law, although it did not stand in absolutely the same category, was pregnant with future consequences for the country. It seemed a strange thing that any one should consider that such subjects ought not to form part of a University training, but ten years ago they would have been looked upon as altogether out of the pale of a University curriculum.[21]

Nonetheless, by placing his own profession, the Law, in a somewhat different "category," Collins seemed to suggest an uneasiness with the leveling tendencies of his own position. When Sir Nathan Bodington, the vice-chancellor, replied to the toast, he struck a simlar note of advocacy of professional and technical education, albeit in a more moderate tone and without any tendency to place all occupations on an equal footing:

> They were trying to think of the University as that which provided, not for the education of a privileged class, nor for the education of one or two of the learned professions, but for something which was above the secondary education a boy received at school, and which was necessary for any man who wanted to be a leader in his calling.[22]

At the ancient universities, there was also some movement toward more professional and technical education, but it proceeded more slowly and amid more opposition. The proliferation of independent degree-granting universities after 1900 and the lure of government grants probably had some effect in hastening this development since, prior to this time, efforts toward more professional education, especially in the newer professions, were generally defeated at Oxford and Cambridge on the traditional ground that it was not the proper role of the university to provide anyone with training "in the technicalities of their calling," as the Oxford opponents of the creation of a teacher training course complained in 1891.[23] After 1900, however, the proponents of such plans were more often successful. At Oxford, diploma courses in engineering, mining, education, surveying and forestry were all established in 1904 or soon there-

18. See Stanley Dumbell, *The University of Liverpool 1903–1953: A Jubilee Book* (Liverpool, 1953), 9–10.
19. See William H. Draper, *Sir Nathan Bodington* (London, 1912), 193.
20. See Arthur W. Chapman, *The Story of a Modern University: A History of the University of Sheffield* (London, 1955), 159, 213–19, 219–23, 224.
21. This speech is quoted in *Sir Nathan Bodington*, 192.
22. *Sir Nathan Bodington*, 192–93.
23. See, *Opposition to a Proposal to Establish in the University "A Day-College for Training Elementary Teachers"* [Oxford], June 2 [1891, handwritten], G. A. Oxon, c. 153.

after. At Cambridge, courses in industrial design and agriculture were introduced while engineering obtained both an ordinary degree and a tripos.

A few of the more radical college tutors were even wholeheartedly in favor of honors schools and degrees in the subjects of the new professions. One group of eight Oxford college tutors proposed in 1907:

> The University fails in the trust which the country has come to repose in it as an educational authority, if it omits to provide such Faculty organization for any established profession or calling, which from time to time comes to demand specialized theoretic training in its practitioners. To limit Faculty organization to the subject matter of the professions which were already recognized as such in 1400 A.D. is to claim that Oxford has no concern with the education of a large section of the modern world. The strongest claims are those of the professions of teaching, engineering, and applied science generally, and, in England at all events, of agriculture.[24]

A chair in engineering was established at Oxford in 1908 and the new professor, Charles Frewin Jenkin, by skillfully accepting traditional beliefs in the value of apprenticeship and the confining of university study to the more theoretical aspects of his subject (and by explicitly eschewing continental examples) was able to persuade the University to create an honor school in engineering.[25]

Jenkin's argument for creating a degree program in engineering is worth exploring in some detail since it illustrates the skillful blending of new ideas with long-established values. Jenkin was very much the right person to introduce engineering into Oxford since he was a firm believer in building on traditional English practices. He was no admirer of the "polytechnics" of France and Germany. He quoted approvingly a witness before the Royal Commission on Technical Education (1884) who criticized foreign technical schools: "Those schools are apt to teach the student details which he mistakes afterwards for principles."[26] Jenkin argued that it was not possible to train an engineer exclusively through formal schooling. Theory could be taught in this way, but only experience could supply the rest. "Is it possible by any college education to make a man an engineer?" Jenkin asked. "No, it is not. All that can be given in college is the scientific training. Science can be taught, but before the training is complete the engineer must learn a host of facts which he can only learn by experience. Experience cannot be taught."[27] Jenkin argued that the old system of apprenticeship alone had its defects as a sole training for engineers, but that the ideal would be to combine theoretical training in the university with apprenticeship afterwards. He attacked the technical institutes which had been gaining popularity in England:

> The great extension of technical schools in England is, I believe, largely the result of copying the continental and American practice. The palatial buildings and costly equipment impress English visitors, and the public cry out for similar appliances here; but I believe it is a retrograde step. These schools abroad were built because they lacked what we had. Are we to throw away our apprenticeship system and follow them in a vicious cycle?[28]

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24. *Oxford and the Nation.* Reprinted from *The Times* (London, 1907), 33.
25. See Jenkin's inaugural address, *Engineering Science* (Oxford, Oct. 16, 1908), 2625 d 55 (10).
26. Jenkin, 7.
27. Jenkin, 6.
28. Jenkin, 8.

Jenkin was also very tactful on the sensitive question of finances. Other science professors had complained often and clamorously of the poor provision for scientific instruction and research at Oxford. It must have been quite pleasant to this University audience, therefore, when Jenkin assured them that great work was often accomplished in primitive laboratories.

> When I remember the dingy little classroom in Edinburgh in which my father taught, [he had been one of the first British professors of engineering] and all the engineers who were trained in it—there was no laboratory, no apparatus—I feel sure that Oxford students need not suffer from the roughness of our accommodation or the simplicity of the apparatus, and I am confident that in the future—the near future—as our numbers and needs increase, those generous benefactors who have enabled the Chair to be founded will see that we have a home worthy of the University.[29]

Even in asking the University for a degree program in engineering, Jenkin managed to include a graceful compliment. "I need hardly point out to you how essential a final school in engineering is as a goal for the student to work for," he argued.

> I hope I have shown that the scheme includes an educational course of the highest value and worthy of recognition by the University. Without this recognition the whole must fall to the ground. The other English Universities have long ago made engineering an avenue to their degrees. It may be wise for Oxford to move slowly and consider its steps well, but I believe that the time has now come—I take it that the foundation of this new Chair proves that in your opinion also the time has come—for Oxford to advance ... I appeal to you, therefore, with confidence to receive this scheme favourably, by which the path to Academic honours will be opened to engineers.[30]

Perhaps to some degree due to Jenkin's skillful argument, his appeal was successful and an honor school in engineering was created.

Yet the development of engineering and other professional and technical studies at the ancient universities was by no means smooth. At Cambridge, despite its mathematical traditions and, therefore, its greater receptiveness to science, the more technical and applied branches were often unpopular. It was felt by some that such inappropriate subjects had been forced on the University by government pressure.[31] At Oxford, where scientific traditions were considerably weaker, the hostility to the new subjects was more overt. Bitter animosities were revealed in 1912 over the proposed new Engineering Laboratory in the University Parks. Although some of the hostility to the laboratory was undoubtedly caused by the encroachment on the Parks, there was also a strong current of repugnance and contempt for engineering itself. As one critic of the proposed site bluntly remarked, "[Engineering] must always be, and ought to be, quite a secondary [subject] at Oxford. It is neither possible nor desirable that many of the future engineers of the country should be trained here."[32] Similarly,

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29. Jenkin, 21.
30. Jenkin, 21–22.
31. See Rothblatt, *Revolution of the Dons*, 254–55.
32. See *The Proposed New Engineering Laboratory* ([Oxford,] [1912]). G. A. Oxon c. 310 (100). Even this critic didn't oppose the laboratory itself, but suggested that it would be more appropriate and inexpensive to build it among the tenements of St. Thomas' and St. Ebbes'. See also J. S. Townsend, *The Proposed Engineering Laboratory* ([Oxford,] [1912]) G. A. Oxon. c. 310 (101).

when in 1910 it was proposed to create an honor school in Forestry, the opponents argued squarely against professional education in the university. They complained that in this school "fragments of different Sciences would be studied simply in their application to some particular profession." They also argued that the examination would include "much that is not Science at all, such as Forest Management and the Valuation, Exploitation, and Utilization of Forest Products." They concluded: "It appears to us that an examination of this kind would be inconsistent with the whole character of the Honour Schools of the University."[33] Nonetheless, it is indicative of changing university attitudes that in the end engineering got its laboratory (though not in the Parks) and forestry got its honor school.

With this development of university interest in the professions and, especially, as new degree programs were created, the professions themselves, especially the new and aspiring ones, came to appreciate the traditional value of university degrees as external signs of "scientific" status. It was the existence of university degrees which had given the church, the law and medicine the right to view themselves as "learned" professions. Universities played a crucial role in the creation of the ordered bodies of knowledge on which the claims of a profession to special expertise and to a unique position of dominance over the purchasers of their services had been based. Degrees were valuable, therefore, not only as ornamental symbols of status but as justifications for professional power and autonomy. Even though traditional patterns of professional organization and the previous indifference of the universities had led the new professions to take the alternate route to power and autonomy through licensing and certification by their own "qualifying associations" rather than through the universities, the value of the degree as an additional support for power and status was not wholly lost on the new professions. One manual of advice to the aspiring dentist noted in 1890:

> Many British licentiates run over to America for a post-graduate dental course in the schools or colleges there, and return with a good knowledge of American nicknacks, greater skill in gold-filling, sometimes also a passion for using ether, and generally with the letters D.D.S. (Doctor of Dental Surgery) or D.M.D. (Doctor in Dental Medicine) after their names, the license in America being a University degree.[34]

Despite the author's obvious contempt for the vanity of degrees when the reality of licensing had already been attained, it was evident that other practitioners saw some value in this outward stamp of their new professional status. It was clear that when Liverpool, for example, established its degree program in dental surgery in 1903, it could be certain of at least some interest among dental students.

The Tension Between Practical and Theoretical Training:

The problem was that the clear willingness of the universities after 1900 to provide professional education and even to create new degree programs for nascent professions, came when the English pattern of autonomy for the "qualifying associations"

33. Untitled flysheet dated Feb. 28, 1910 in G. A. Oxon, c. 310 (19).
34. Arthur Turner, *A Manual of Dental Education with Some General Notes upon the Modern Curriculum of the Dental Student* (Edinburgh, [1890]). 26322. e. 12 (6).

of each profession was already firmly established.[35] To give to the universities the power of certification through the granting of degrees would mean a painful diminution in professional independence. When Joseph King M.P. called upon Oxford and Cambridge in 1892 to provide "as much the stepping-stones to a mercantile career, to the engineer's office, to the life of an agriculturist or a scientific man, as it does to the church, the bar, or the schoolmaster's profession,"[36] he was met by a bitter reply from Oxford, which emphasized not the traditional commitment to "liberal education" but the powerlessness of the University in relation to the professions.

> If it is the wish of democracy that success at the University should be a help in all professions, democracy will have to give the University those keys of professions which in other countries are entrusted to its care. Let Mr. King and his friends, as a beginning, inquire how it comes that in this country the Inns of Court and the Incorporated Society—and not the Universities—admit to the two branches of Law, and certain 'Colleges' to the profession of Medicine.[37]

While the continental universities had been gaining from the state the power of professional certification, the English universities had been more concerned to protect their much richer endowments from governmental encroachment. When the English universities began to see professional education as an opportunity rather than as a threat, their chance for power had already been lost.

A good example of the conflicts between entrenched power in the qualifying associations and the accommodations necessary to cooperate with the universities can be seen in the struggles between Sheffield and Leeds Universities and the Incorporated Law Society. In 1908, both universities established law degrees for aspiring solicitors.[38] In order for the university course to have any attraction for students, it was essential that it exempt graduates from some substantial portion of the five years of articled pupilage required by the profession. The Law Society proposed a two year exemption but only on the condition that all degree programs have "the initial and continued approval of the Council of the Law Society." They also wanted to retain the right to question any individual student's qualification for the exemption even after passing the university examinations. Not surprisingly, Leeds and Sheffield protested strongly against these conditions. "It is a fundamental principle of University organization that, in the conduct of its academic work, each University should be autonomous and should bear the full responsibility of the standards exacted in its teachings and examinations," they asserted.

> For the Universities to assent to a condition, under which another body, however eminent, would be in a position to control their performance of the duty entrusted to them by Royal Charter, would be a violation of the spirit of the Charters. It would, moreover, be contrary to the

35. It is significant that one modern English student of the professions uses the existence of these associations as his basic definition of a profession. See Geoffrey Millerson, *The Qualifying Associations: A Study in Professionalization* (London, 1964).
36. "Democracy and Our Old Universities," *The Contemporary Review*, 62 (1892), 707-08.
37. "Contemporary Statistics," *The Oxford Magazine*, 11 (1892), 66.
38. There had been some legal education at both Sheffield and Leeds since their university college period. The Law Society cooperated to the extent of contributing £ 50 to the scheme and the local practitioners agreed to let their clerks attend classes one day a week. See, *The Story of a Modern University*, 154-56.

best interests of education to fetter the judgment of institutions whose standing and records are sufficient guarantees of the character of the training which they provide.[39]

In the end, the universities won this struggle and the Law Society agreed to accept graduates without further examination. Since the new scheme would have the effect of losing practitioners two years in pupilage fees from those clerks who had taken the university option, there was some rationale for their feeling that the profession was making an unduly great sacrifice to obtain university recognition. It should be noted, however, that even this "victory" put the university-educated articled clerk at a one year disadvantage to the clerk who had taken the customary path of office training alone. The university course occupied three years and it only excused the graduate from two years of articled service. It was hardly surprising that many aspiring solicitors continued to prefer the traditional system of training.

The 20th century has been a continuation of this situation. University professors have continued to find it necessary to insist on the status value of their degrees and especially on the role of the university in certifying the "learned" or "scientific" nature of a profession. Two Cambridge professors made this point strongly in their recommendations to the 1922 University Commission. "The Engineering Profession is now making a serious effort to improve its status and to become classified as one of the learned professions," noted Professor C. E. Inglis. "In this movement Cambridge ought to play a leading part and set the standard of engineering education," he concluded hopefully.[40] In a similar vein, Sir William Ridgway asserted: "Our idea in founding the School was to place the art of Architecture on a higher plane than hitherto known, at least in this country, and to make it a science as well as an art."[41] In 1933, Carr-Saunders and Wilson, in their classic study, *The Professions,* also found it necessary to insist that

> it is most desirable that the indispensible technical training not be conducted in too narrow an atmosphere. The association of students studying different techniques, medicine, law, dentistry, engineering, chemistry, and so on, such as occurs in a modern university, may do much to widen understanding and to create diversity of interests. Moreover, since research is a prominent feature of university activities, the atmosphere is less likely to be heavy with instruction than in purely teaching institutions. On this account there is much to be said for the training of entrants to the professions in universities, and much to be said against isolated professional schools.[42]

The same arguments which had been used a hundred years before against separate theological colleges were still useful in the continuing struggle to integrate the universities and professional education.

In the professions as well, those who have encouraged closer university ties have continued to feel dissatisfaction, despite some movement toward the implementation of their principles. The historian of English accountancy remarked in 1954:

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39. *The Story of a Modern University,* 219-23.
40. "Memoranda with Regard to Reforms at Cambridge," MS. Top. Oxon. b. 105 (13), 2. Professor Inglis's concern was to abolish the "special course" in engineering at Cambridge, leaving only the tripos, since this ordinary degree was not accepted by the qualifying associations as a professional qualification.
41. "Memoranda with Regard to Reforms at Cambridge," MS. Top. Oxon. b. 105 (29), 2.
42. A. M. Carr-Saunders and P. A. Wilson, *The Professions* (Oxford, 1933), 373-74.

It is not to decry or to belittle members of a great profession when I confess that what, above all considerations, prompted me to embark on writing this historical study has been the desire to draw attention to the limited intellectual development of the profession. Perhaps the appearance, a century and a half ago, of modern accounting as a severely pragmatic subject is largely responsible for this phenomenon. ... The most significant intellectual addition to professional culture has been the linking-up of the profession with the universities. Such attempts as have been translated into reality thus far are important departures but still incommensurate with the needs of a major profession. More emphasis upon several matters embracing the intellectual side of accounting is needed to remedy current shortcomings.[43]

Stacey argues that accountants ought to study not merely the technical skills of their profession but the social and economic structure of the society in which they function. He complains that the lack of university faculties in this field and the continued dominance of the apprenticeship (pupilage) system has led to an overly pragmatic and narrow spirit in the profession.[44]

The very existence of this persistent chorus of assertion, advice and complaint from the universities and the professions indicates the continued strength of traditional attitudes. Although there has been a steady expansion in the linkage between English universities and the professions in the 20th century as the professions themselves have grown,[45] the mark of their historical antipathies can still be seen, both in the universities and in the professions. The low status of business and of technical and applied scientific studies as opposed to pure science and arts subjects has been one legacy of this situation. The relative smallness of the English university population in relation to the other developed nations is another result. The comparatively weak link between English universities and industry has also stemmed from this cause. Essentially, by clinging to the value of "liberal" and non-vocational education, the English universities placed themselves in a situation which severely limited their potential for both growth and influence.

43. Nicholas A. H. Stacey, *English Accountancy 1800–1954* (London, 1954), xvi.
44. Nonetheless, one can understand that from the viewpoint of practitioners, the inevitable losses in pupilage fees might loom larger than the intellectual benefits of university affiliation.
45. The British census figures for the professions are difficult to interpret because changes in the system of occupational categories make it impossible to trace trends for more than thirty years. Nonetheless, it seems clear that the major growth in the professions has occurred in the period since 1920. From 1881 to 1911 the category of "professional occupations and their subordinate services" grew modestly from 3.9% to 4.4% of the employed population. From 1921 to 1951, however, the new category of "professional and technical occupations" grew from 4.1% to 6.1% with most of the growth (4.4% to 6.1%) occurring between 1931 and 1951. These figures were obtained by combining the statistics for males and females from B. R. Mitchell and Phyllis Deane, *Abstract of British Historical Statistics* (Cambridge, 1961), 60–61.